



Harvard LTER Schoolyard Program

Teacher Developed Lessons and Documents that integrate
Harvard Forest Schoolyard Ecology Themes into curriculum.

- **Presentation Title:** *Plotting the Pool Footprint with Excel*
- **Description of Presentation:** Field and Graphing exercise to create a graphic representation of the shape of the vernal pool.
- **Teacher/Author:** Brenda Marcoux
- **School:** Wilmington High School
- **Level:** 9,10,11,12th Grade
- **Date:** April 13, 2011

Plotting the Pool Footprint with Excel



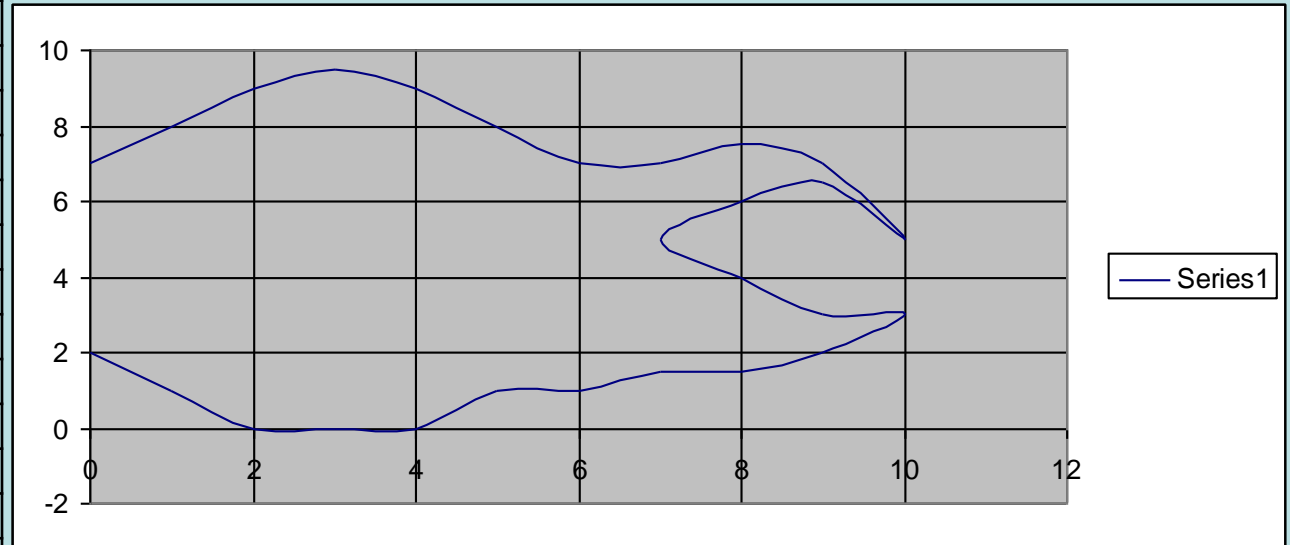
By Brenda
Marcoux

Plotting the Pool Footprint with Excel

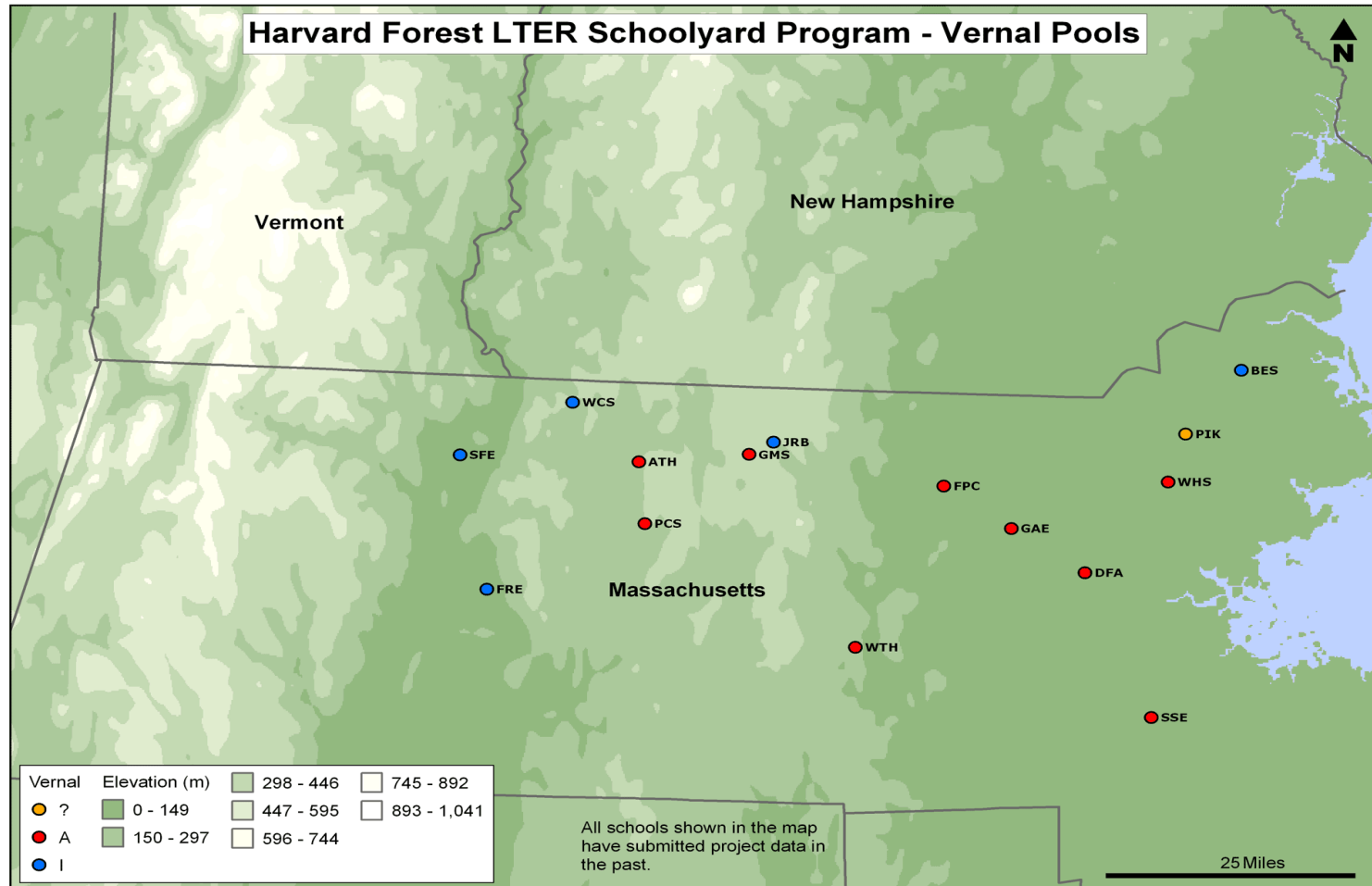
- A primary goal of Forest ecology in the Schoolyard program:
- Enhance science learning through teacher professional development that focuses on the implementation of field based ecological research projects for K-12 students
- My goals pre-project included:
- Showing my students that collecting data can contribute to real science
- Increasing my content knowledge about vernal pools
- Learning more about analyzing data with my students
- ** Excel is available at most schools, no need to purchase any new software

Hypothetical data and plot

0	2
1	1
2	0
3	0
4	0
5	1
6	1
7	1.5
8	1.5
9	2
10	3
9	3
8	4
7	5
8	6
9	6.5
10	5
9	7
8	7.5
7	7
6	7
5	8
4	9
3	9.5
2	9
1	8
0	7



Where in the world isWildwood pool?



Bird's eye view







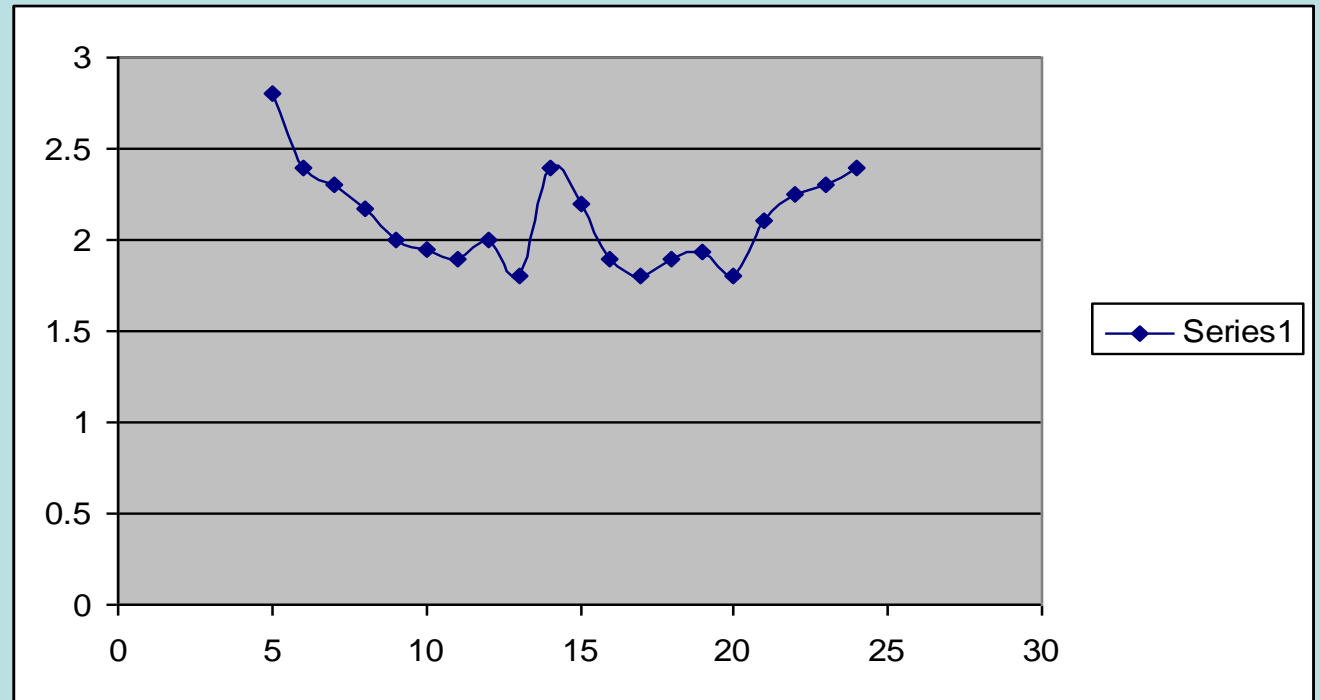






Early data for footprint

Meters long	Meters wide
8	2.17
9	2
10	1.95
11	1.9
12	2
13	1.8
14	2.4
15	2.2
16	1.9
17	1.8
18	1.9
19	1.93
20	1.8
21	2.1
22	2.25
23	2.3
24	2.4



Plan for Spring/Fall

- Students will continue to collect data points to complete the footprint project.

